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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: NH-000-0085-02(153), Fulton County
P.I. No.: 762380
SR 400/I-85 Connector Ramps

OFFICE: Engineering Services

DATE: June 5, 2009

FROM: Ronald E. Wishon, Project Review Engineer REW

TO: James B. Buchan, P.E., State Urban Design Engineer
Attention: Albert Shelby, Project Manager

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

SB SR 400 to NB I-85 Ramp:

ALT No.	Description	Savings PW & LCC	Implement	Comments
ALIGNMENT (AN)				
AN-3	Replace the flyover ramp with a loop using Lindbergh Drive. Exit SR 400 SB to a new stop light on Lindbergh, cross east over Lindbergh Drive and turn left onto the existing HOV ramp to NB I-85.	$17,476,838	No	This recommendation would contradict the Need and Purpose of the project which is to provide freeway connectivity between the two regionally significant facilities, and improve driver expectancy. The current HOV access would be eliminated. Moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp. Contradicts current GDOT policy to develop a managed lane system.

ALIGNMENT (AN) Continued				
AN-4	Replace the flyover ramp with a loop using Lindbergh Drive. Exit SR 400 SB to a new stop light on Lindbergh, cross east over Lindbergh Drive and turn left onto a new entry ramp to NB I-85 (for the SB SR 400 to NB I-85 Ramp).	$17,346,920	No	This recommendation would contradict the Need and Purpose of the project which is to provide freeway connectivity between the two regionally significant facilities, and improve driver expectancy. Moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp. The recommendation would cause significant environmental impacts. Mitigation requirements would dictate that the entire ramp be placed on a bridge structure which would increase the cost by approximately $3 million.
SECTION (SN)				
SN-1	Use a 30-foot wide section with a 14-foot travel lane flanked by 6-foot and 10-foot shoulders in lieu of a 32-foot section.	$1,949,181	Yes	This should be done. The 2-feet reduction will be from the shoulder width, the travel lane will remain 16-foot.

SECTION (SN) Continued				
SN-2	Use a 28-foot wide section with a 14-foot travel lane flanked by 4-foot and 10-foot shoulders in lieu of a 32-foot section (for the SB SR 400 to NB I-85 Ramp).	$2,725,498	No	Using a 4-foot inside median reduces horizontal sight distance to the point that it will only accommodate a maximum design speed of 40 mph. GDOT and FHWA both recommend that system to system ramps achieve a minimum of 45 mph whenever possible. The 14-foot wide travel lane does not meet AASHTO's minimum width of 15-feet and is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-feet.
SN-3	Use a 26-foot wide section with a 12-foot travel lane flanked by 4-foot and 10-foot shoulders in lieu of a 32-foot section (for the SB SR 400 to NB I-85 Ramp).	$3,609,536	No	Refer to the first paragraph in VE Recommendation SN-2, above. Similarly, the 12-foot wide travel lane does not meet AASHTO's minimum width of 15-feet and is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-feet.

BRIDGE (BN)				
BN-1	Lower the profile of the SR 400 SB to I-85 NB ramp by using steeper grades, minimum truck clearances and a 45 mph design speed (for the SB SR 400 to NB I-85 Ramp).	$94,039	Yes	This should be done. The Bridge Office will use shallower beams to lower the profile approximately 5 feet. This will allow for the grades to be reduced without decreasing the design speed.
BN-5	Use radially oriented piers and eliminate the skew on the pier bents (for the SB SR 400 to NB I-85 Ramp).	Design Suggestion	Yes	This should be done.
BN-8	Add a new exit ramp from I-85 to Cheshire Bridge Road to improve traffic flow.	Cost Increase (-$1,232,013)	No	The recommendation would mix freeway traffic with local traffic. Implementing the recommendation would complicate the freeway guide signing along southbound SR 400, would cause significant ROW impacts, and increase the construction costs of the overall project.
BN-9	Southbound SR 400 to Northbound I-85 Ramp – Use long span steel girders over the I-85 with 74" precast concrete bulb tees for all other approach spans. Reduce the number of columns required.	Design Suggestion	No	The steel span alternative was evaluated and the additional superstructure depth required for the steel span increases the profile and offsets the apparent cost saving.

SB I-85 to NB SR 400 Ramp:

ALIGNMENT (AS)				
AS-1	Replace the Southbound I-85 ramp with a partial surface solution using Sidney Marcus Boulevard; tie new elevated off-ramp into the west end of Sidney Marcus, close Pine Street, add cost for new ROW, and include new wall on north side of Sidney Marcus (for the SB I-85 to NB SR 400 Ramp).	Cost Increase (-$2,828,850)	No	This recommendation would contradict the Need and Purpose of the project which is to provide freeway connectivity between the two regionally significant facilities, and to improve driver expectancy. Moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp. Would also cause additional ROW impacts.
AS-1A	Replace the Southbound I-85 ramp with a full at-grade solution using Sidney Marcus Boulevard; tie new off-ramp from I-85 into the east end of Sidney Marcus, and add additional ROW (for the SB I-85 to NB SR 400 Ramp).	$174,392	No	This recommendation would contradict the Need and Purpose of the project which is to provide significantly improved connectivity between the two regionally significant facilities, and to improve driver expectancy.

ALIGNMENT (AS) Continued				
AS-3/4	Reduce the design speed from 50 MPH to 40 MPH and shorten the curve radius from 1130 ft to 600 ft (for the SB I-85 to NB SR 400 Ramp).	$1,314,164	No	The designer was unable to replicate the proposed alignment without impacting the SR 400 bridge (the basis for the entire savings listed) while also maintaining two separate bridges at the off-ramp from I-85 Southbound (required by the GDOT Bridge Office).
SECTION (SS)				
SS-1	Use 30 ft wide section with a 14 ft travel lane flanked by 6 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).	$419,328	No	The 14-foot wide travel lane does not meet AASHTO's minimum width of 15-feet and is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-feet. Redesign costs and other related costs would be $381,082 and would delay the project by 6-12 months. Providing twin structures in-lieu of a single wide bridge with future turn lanes eliminates the option of the future diamond interchange. A different type of interchange would have to be constructed, possibly a partial clover leaf.

SECTION (SS) Continued				
SS-2	Use 28 ft wide section with a 14 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).	$840,269	Yes	This will be done with a 16-feet wide travel lane with a left shoulder width of 4-feet and a right shoulder width of 8-feet, which equals a total width of 28-feet. The revised shoulder widths would still maintain minimum sight distance requirements for a 45 mph design speed. The 16-foot wide travel lane is consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-feet.
SS-3	Use 26 ft wide section with a 12 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).	$1,262,210	No	See the first paragraph in VE recommendation SS-1 above. Similarly, the 12-feet wide travel lane does not meet AASHTO's minimum width of 15-feet and the 12-feet wide travel lane is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-feet.

BRIDGE (BS) Continued				
BS-2	Shorten the bridge span over Buford Highway from 170 ft to 165 ft and use 74 inch deep precast concrete bulb tee girders in lieu of steel plate girders (for the SB I-85 to NB SR 400 Ramp).	$161,840	No	After consulting with the GDOT Office of Bridge Design, this bridge layout has been revised from a single span to three spans allowing the use of AASHTO beams with a shallower superstructure and bulb tees. The revised proposed design would have a similar cost savings to the VE alternative.

Additional information was provided to FHWA by email (attached) and by letter from Urban Design.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved: Gerald M. Ross Date: 6/8/09
Gerald M. Ross, P. E., Chief Engineer

Approved: Richard Wayne Fedora Date: 6/17/2009
for Rodney Barry, P.E., FHWA Division Administrator

REW/DMF/LLM

Attachments

c: R. Wayne Fedora/Mindy Roberson/LaToya Johnson
Genetha Rice Singleton
Ben Buchan/Darrell Richardson/Charles Robinson
Albert Shelby
Chester Thomas
Paul Liles/Bill Ingalsbe/Bill Duvall/Judy Meisner
Amber Phillips
Mickey McGee
Ken Werho
Andres Netterville
Lakeshia Osborn
Lisa Myers
Matt Sanders

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-000-0085-02(153)
Fulton County
SR400/I-85 Connector Ramps
PI No. 762380

OFFICE Urban Design

DATE March 20, 2009

FROM James B. Buchan, P.E., State Urban Design Engineer

TO Ron Wishon, Acting State Review Engineer

SUBJECT Value Engineering Study Report Responses

This Office has received and reviewed the Value Engineering Study Final Report dated January 26, 2009. The study has developed sixteen alternatives. The following are the alternatives with Urban Design's recommendations for each.

SB SR 400 to NB I-85 Ramp

VE Recommendation AN-3: Replace the flyover ramp with a loop using Lindbergh Drive. Exit SR 400 SB to a new stop light on Lindbergh, cross east over Lindbergh Dr. and turn left onto the existing HOV ramp to NB I-85 (for the SB SR 400 to NB I-85 Ramp).

This recommendation calls for the replacement of the proposed flyover ramp and routing traffic via a surface street (Lindbergh Drive) through two closely spaced traffic signals and eliminate the currently operationally exclusive HOV access. This recommendation was estimated in the VE Study to save $17.5 Million in construction costs.

This recommendation would contradict the Need and Purpose of the project which is to provide freeway system to system connectivity between the two regionally significant facilities, and to better satisfy driver expectancy. Additionally, moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp.

The recommendation would also eliminate the current HOV access and would contradict current GDOT policy to develop a managed lane system.

This alternative is not recommended as a part of this project.

VE Recommendation AN-4: Replace the flyover ramp with a loop using Lindbergh Drive. Exit SR 400 SB to a new stop light on Lindbergh, cross east over Lindbergh Dr. and turn left onto a new entry ramp to NB I-85 (for the SB SR 400 to NB I-85 Ramp).

This recommendation calls for the new ramp to be added to the southeast of I-85. Ramp construction assumes the pavement can be placed on fill. It would appear that the ramp parallels and enters NB I-85 along with Buford Dr.

This recommendation would contradict the Need and Purpose of the project which is to provide freeway system to system connectivity between the two regionally significant facilities, and to better satisfy driver expectancy. Additionally, moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp.

This recommendation was estimated in the VE Study to save $17.3 Million in construction costs. However, the proposal presented by the Value Engineering Team inaccurately assumes the new ramp can be placed on fill material. All areas between I-85 and the adjacent historic district are deemed wetlands and contain numerous streams. The recommendation would cause significant environmental impact. Mitigation requirements would dictate that the entire ramp be placed on a bridge structure which would increase the construction cost by approximately $3 Million, which would decrease the estimated cost savings to approximately $14 Million.

This alternative is not recommended as a part of this project.

VE Recommendation SN-1: Use 30 ft wide section with a 14 ft travel lane flanked by 6 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB SR 400 to NB I-85 Ramp).

This recommendation suggests reducing the ramp typical section width of 32-ft by 2-ft, all deducted from the lane width. This recommendation was estimated in the VE Study to save $1.95 Million in construction costs.

The recommended change to the proposed design that varies from the VE recommendation is a 16-ft wide travel lane with a left shoulder width of 6-ft and a right shoulder width of 8-ft, which equals a total width of 30-ft. The AASHTO publication, ***A Policy on Geometric Design of Highways and Streets***, 2004, indicates on Page 838 "Directional ramps with a design speed over 40 mph should have a paved right shoulder width of 8 to 10-ft and a paved left shoulder width of 1 to 6-ft." The revised shoulder widths meet these criteria.

AASHTO also indicates in Exhibit 10-67, "Design for Turning Roadways", for Case II (One-lane, one-way operation – with provision for passing a stalled vehicle) and Traffic Condition B, a minimum total pavement width of 19-ft. is required. Since this total pavement width includes paved shoulders, the effective minimum travel lane width is 15-ft., which corresponds to the minimum total pavement width for Case I (One-lane, one way operation – no provision for passing a stalled vehicle) and Traffic Condition B. The proposed 16-ft wide travel lane exceeds this criterion. Traffic Condition B was used for this project, since the design year 24-hour truck percentages are 3.5 percent and 7.5 percent for SR 400 and I-85, respectively.

AASHTO also indicates on Page 840 "Ramps on overpasses should have the full-approach roadway width carried over the structure." The bridge over I-85 for the proposed ramp would have the same shoulder widths as the roadway and therefore meet this recommendation.

The revised shoulder widths would still maintain minimum sight distance requirements for a 45 mph design speed.

The 16-ft. wide travel lane is consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative with the variation is recommended as a part of this project.

VE Recommendation SN-2: Use 28 ft wide section with a 14 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB SR 400 to NB I-85 Ramp).

This recommendation suggests reducing the ramp typical section width by 4-ft, of which 2-ft is deducted from the lane width and 2-ft is from the inside shoulder. This recommendation was estimated in the VE Study to save $2.73 Million in construction costs.

Using a 4-ft inside median reduces horizontal sight distance to the point that it will only accommodate a maximum design speed of 40 mph. GDOT and FHWA both recommend that system to system ramps achieve a minimum of 45 mph whenever possible.

The 14-ft wide travel lane does not meet AASHTO's minimum width of 15-ft. from Exhibit 10-67, which is described in the previous explanation for VE Recommendation SN-1. The 14-ft. wide travel lane is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative is not recommended as a part of this project.

VE Recommendation SN-3: Use 26 ft wide section with a 12 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB SR 400 to NB I-85 Ramp).

This recommendation suggests reducing the ramp typical section width by 6-ft. Of which 4-ft is deducted from the lane width and 2-ft is from the inside shoulder. This recommendation was estimated in the VE Study to save $3.61 Million in construction cost.

Using a 4-ft inside median reduces horizontal sight distance to the point that it will only accommodate a maximum design speed of 40 mph. GDOT and FHWA both recommend that system to system ramps achieve a minimum of 45 mph whenever possible.

Similar to VE Recommendation SN-2, the 12-ft wide travel lane does not meet AASHTO's minimum width of 15-ft. from Exhibit 10-67, which is described in the previous explanation for VE Recommendation SN-1. The 12-ft. wide travel lane is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative is not recommended as a part of this project.

VE Recommendation BN-1: Lower the profile of the SR 400 SB to I-85 NB ramp by using steeper grades, minimum truck clearances and a 45 MPH design speed (for the SB SR 400 to NB I-85 Ramp).

This recommendation assumes a structure depth developed but not yet approved by the GDOT Office of Bridge Design. This recommendation was estimated in the VE Study to save $94,039.00 in construction costs.

The current GDOT Office of Bridge Design approved concept structure type uses 74" Bulb Tee AASHTO beams which will allow the profile to be lowered approximately five feet throughout the length of the structure. This will allow for the grades to be reduced without decreasing the design speed.

This alternative with the variation is recommended as a part of this project.

VE Recommendation BN-5: Use radially oriented piers and eliminate the skew on the pier bents (for the SB SR 400 to NB I-85 Ramp).

This recommendation proposes reorienting a skewed pier and using radial oriented piers instead.

The current GDOT Office of Bridge Design approved concept structure type uses radially oriented piers. The estimate cost savings for this recommendation cannot be estimated at this time based on the limited information that is available related to the bridge construction details.

This alternative is recommended as a part of this project.

VE Recommendation BN-8: Add a new exit ramp from I-85 to Cheshire Bridge Road to improve traffic flow.

This recommendation suggests adding an additional exit point along the ramp in an already congested interchange. This recommendation was estimated in the VE Study to cost an additional $1.23 Million in construction costs.

The recommendation would mix system to system freeway traffic with local traffic. Additionally, implementing the recommendation would complicate the freeway guide signing along Southbound SR 400, would cause significant R/W impacts, and increase the construction costs of the overall project.

This alternative is not recommended as a part of this project.

VE Recommendation BN-9: Southbound SR 400 to Northbound I-85 Ramp – Use long span steel girders over the I-85 with 74" precast concrete bulb tees for all other approach spans. Reduce the number of columns required.

This recommendation suggests using a combination superstructure type with bulb tees in all locations except over I-85 where a steel span will be used.

The steel span alternative was evaluated and the additional superstructure depth required for the steel span increases the profile and offsets the apparent cost saving.

This alternative is not recommended as a part of this project.

SB I-85 to NB SR 400 Ramp

VE Recommendation AS-1: Replace the Southbound I-85 ramp with a partial surface solution using Sidney Marcus Boulevard; tie new elevated off-ramp into the west end of Sidney Marcus, close Pine Street, add cost for new ROW, and include new wall on north side of Sidney Marcus (for the SB I-85 to NB SR 400 Ramp).

This recommendation calls for the replacement of the proposed ramp and routing traffic via a surface street option. This recommendation was estimated in the VE Study to cost an additional $2.83 Million in construction costs.

This recommendation would contradict the Need and Purpose of the project which is to provide freeway system to system connectivity between the two regionally significant facilities, and to better satisfy driver expectancy. Additionally, by moving the exit point of the new ramp would compound the current congestion problem at the merge area between SB SR 400 and SB I-85 Ramp. This recommendation would also cause additional R/W impacts.

This alternative is not recommended as a part of this project.

VE Recommendation AS-1A: Replace the Southbound I-85 ramp with a full at-grade solution using Sidney Marcus Boulevard; tie new off-ramp from I-85 into the east end of

Sidney Marcus, and add additional ROW (for the SB I-85 to NB SR 400 Ramp).

This recommendation calls for the replacement of the proposed ramp and routing traffic via a full surface street option. This recommendation was estimated in the VE Study to save $174,392.00 in construction costs.

This recommendation would contradict the Need and Purpose of the project which is to provide significantly improved connectivity between the two regionally significant facilities, and to better satisfy driver expectancy.

This alternative is not recommended as a part of this project.

VE Recommendation AS-3/4: Reduce the design speed from 50 MPH to 40 MPH shorten the curve radius from 1130 ft to 600 ft (for the SB I-85 to NB SR 400 Ramp).

This recommendation proposes reducing the existing design speed and implementing the use of a compound curve consisting of 600' radius followed by a short 500' radius curve. This recommendation was estimated in the VE Study to save $1.31 Million in construction cost.

The designer was unable to replicate the proposed alignment without impacting the SR 400 bridge (the basis for the entire savings listed) while also maintaining two separate bridges at the off-ramp from I-85 Southbound (required by the GDOT Bridge Group).

This alternative is not recommended as a part of this project.

VE Recommendation SS-1: Use 30 ft wide section with a 14 ft travel lane flanked by 6 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).

This recommendation suggests reducing the ramp typical section width by 2-ft, all deducted from the lane width. This recommendation was estimated in the VE Study to save $419,328.00 in construction costs.

The AASHTO publication, ***A Policy on Geometric Design of Highways and Streets***, 2004, indicates in Exhibit 10-67, "Design for Turning Roadways", for Case II (One-lane, one-way operation – with provision for passing a stalled vehicle) and Traffic Condition B, a minimum total pavement width of 19-ft. is required. Since this total pavement width includes paved shoulders, the effective minimum travel lane width is 15-ft., which corresponds to the minimum total pavement width for Case I (One-lane, one way operation – no provision for passing a stalled vehicle) and Traffic Condition B. The 14-ft wide travel lane in this VE Recommendation SS-1 does not meet this criterion. Traffic Condition B was used for this project, since the design year 24-hour truck percentages are 3.5 percent and 7.5 percent for SR 400 and I-85, respectively. The 14-ft. wide travel lane is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative is not recommended as a part of this project.

VE Recommendation SS-2: Use 28 ft wide section with a 14 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).

This recommendation suggests reducing the ramp typical section width by 4-ft. of which 2-ft is deducted from the lane width and 2-ft is from the outside shoulder. This recommendation was estimated in the VE Study to save $840,269.00 in construction cost.

The recommended change to the proposed design that varies from the VE recommendation is a 16-ft wide travel lane with a left shoulder width of 4-ft and a right shoulder width of 8-ft. which equals a total width of 28-ft. The AASHTO publication, ***A Policy on Geometric Design of Highways and Streets***, 2004, indicates on Page 838 "Directional ramps with a design speed over 40 mph should have a paved right shoulder width of 8 to 10-ft and a paved left shoulder width of 1 to 6-ft." The revised shoulder widths meet these criteria.

AASHTO also indicates in Exhibit 10-67, "Design for Turning Roadways", for Case II (One-lane, one-way operation – with provision for passing a stalled vehicle) and Traffic Condition B, a minimum total pavement width of 19-ft. is required. Since this total pavement width includes paved shoulders, the effective minimum travel lane width is 15-ft., which corresponds to the minimum total pavement width for Case I (One-lane, one way operation – no provision for passing a stalled vehicle) and Traffic Condition B. The proposed 16-ft wide travel lane exceeds this criterion. Traffic Condition B was used for this project, since the design year 24-hour truck percentages are 3.5 percent and 7.5 percent for SR 400 and I-85, respectively.

AASHTO also indicates on Page 840 "Ramps on overpasses should have the full-approach roadway width carried over the structure." The bridge over I-85 for the proposed ramp would have the same shoulder widths as the roadway and therefore meet this recommendation.

The revised shoulder widths would still maintain minimum sight distance requirements for a 45 mph design speed.

The 16-ft. wide travel lane is consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative with the variation is recommended as a part of this project.

VE Recommendation SS-3: Use 26 ft wide section with a 12 ft travel lane flanked by 4 ft and 10 ft shoulders in lieu of a 32 ft section (for the SB I-85 to NB SR 400 Ramp).

Using a 10-ft outside median (inside of curve) is a viable option but this would limit the available width for maneuvering around a traffic incident. This recommendation was estimated in the VE Study to save $1.26 Million in construction costs.

This recommendation suggests reducing the ramp typical section width by 6-ft. Four feet is deducted from the lane width and 2-ft is from the outside shoulder.

Similar to VE Recommendation SS-1, the 12-ft wide travel lane does not meet AASHTO's minimum width of 15-ft. from Exhibit 10-67, which is described in the previous explanation for VE Recommendation SS-1. The 12-ft. wide travel lane is not consistent with GDOT Construction Details for Interchange Ramps (R-1, R-2 and R-3), which all indicate a travel lane width of 16-ft.

This alternative is not recommended as a part of this project.

VE Recommendation BS-2: Shorten the bridge span over Buford Highway from 170 ft to 165 ft and use 74 inch deep precast concrete bulb tee girders in lieu of steel plate girders (for the SB I-85 to NB SR 400 Ramp).

This recommendation suggests using bulb tee girders by shortening the bridge. This recommendation was estimated in the VE Study to save $161,840.00 in construction costs.

After consulting with the GDOT Office of Bridge Design, this bridge layout has been revised from a single span to three spans allowing the use of AASHTO beams with a shallower superstructure and bulb tees. The revised proposed design would have a similar cost savings to the VE alternative.

This alternative is not recommended as a part of this project.

JBB:AVS

From: Shelby, Albert
Sent: Friday, April 24, 2009 12:15 PM
To: Fadool, Douglas
Subject: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380

We are going to discuss with her next week.

From: Fadool, Douglas
To: Shelby, Albert
Sent: Fri Apr 24 07:40:14 2009
Subject: RE: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380,

Have you heard back from Mindy yet?

From: Myers, Lisa
Sent: Thursday, April 16, 2009 10:03 AM
To: melinda.roberson@dot.gov
Cc: Fadool, Douglas; Latoya.Johnson@dot.gov; R.Wayne.Fedora@dot.gov; Shelby, Albert
Subject: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380,

Mindy,

I forwarded your comments to Albert. He is going to look into SN-1 and SN-2 and get back to us. He may contact you for more info. In the meantime, we'll hold off on processing the implementation letter until we resolve these 2 issues.

Lisa

From: melinda.roberson@dot.gov [mailto:melinda.roberson@dot.gov]
Sent: Wednesday, April 15, 2009 9:00 AM
To: Myers, Lisa
Cc: Fadool, Douglas; Latoya.Johnson@dot.gov; R.Wayne.Fedora@dot.gov
Subject: RE: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380

Lisa,

At this time, FHWA does not concur with the variation proposed for recommendations SN-1 or SS-2. We concur that using a 8' shoulder width meets the referenced language from the Green Book, however, we feel there should to be a 2' offset to the face of barrier for a total distance of 10' from edgeline to face of barrier, especially considering that there is some consideration being given to semitrailer vehicles in the design. Please refer to page 314-315 of the 2004 Green Book.

FHWA concurs with all other recommendations in the report. Please advise us how you would like to proceed.

Thanks,

Mindy Roberson

From: Myers, Lisa [mailto:lmyers@dot.ga.gov]
Sent: Wednesday, April 08, 2009 2:36 PM
To: Roberson, Melinda <FHWA>
Cc: Fadool, Douglas
Subject: FW: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380

Melinda,

Here are the responses to the questions you sent this morning. Please let Douglas or me know if you need anything else.

Lisa

From: Shelby, Albert
Sent: Wednesday, April 08, 2009 2:30 PM
To: Myers, Lisa
Cc: Fadool, Douglas; Robinson, Charles A.
Subject: FW: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380

Below and attached are the answers to Melinda's questions.

Thanks,
Albert V. Shelby, III

From: Keith Strickland [mailto:KStrickland@HNTB.com]
Sent: Wednesday, April 08, 2009 11:56 AM
To: Shelby, Albert
Cc: Robinson, Charles A.
Subject: RE: VE Study Report for NH-000-0085-02(153), Fulton County, PI No. 762380

Albert,

My responses are indicated in red font and I have attached a markup of the typical sections.

Keith

Recommendation SN-1: Is there barrier along the left and/or right side of this ramp? *YES* If on the left, was sight distance verified? *YES, that is why the shoulder was increased to 6 ft.* If on the right, is there a 10' shoulder and then a 2' offset to barrier or is it 10' from edgeline to face of barrier? (If it is easier, you can just provide a typical for this ramp) *The original VE recommendation was to reduce lane width by 2 ft and maintain 10 ft right shoulder. HNTB's response was to maintain 16 ft travel lane and reduce outside shoulder from 10 ft to 8 ft (from edge of travel to face of barrier). I have included a markup of the original typical section to illustrate this change (Sheet 2 of 2).*

Recommendation BN-1: What is posted speed of mainline for 400 and I-85 at this location? *Both are 55 mph.*

Recommendation SS-2: Is there barrier along the left and/or right side of this ramp? *YES If on the right, is there a 10' shoulder and then a 2' offset to barrier or is it 10' from edgeline to face of barrier? The original VE recommendation was to reduce lane width by 2 ft and reduce the right shoulder width by 2 ft to 10 ft (from edge of travel to face of barrier). HNTB's response was to maintain 16 ft travel lane and reduce outside shoulder width by 4 ft from 12 ft to 8 ft (from edge of travel to face of barrier). I have included a markup of the original typical section to illustrate this change (Sheet 1 of 2). Please note when reviewing Sheet 1 of 2 that the current concept has the proposed SR 400 NB bridge as a completely separate structure; therefore, the original typical section in the two-lane area where the SR 13 and SR 400 ramps overlap does not apply.*

Gerald M. Ross, P.E., Commissioner/Chief Engineer

DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1000

May 1, 2009

Mr. Rodney Barry
Attn: Ms. Melinda Roberson
Federal Highway Administration (FHWA) – Georgia Division
61 Forsyth St. SW
Atlanta, Georgia 30303

Re: Project NH000-0085-02(153), Fulton County - P.I. No. 762380 – SR 400/I-85 Connector Ramps Minimum Shoulder Widths for Ramps

Dear Ms. Roberson:

The Georgia Department of Transportation (GDOT) Office of Urban Design and the project consultant HNTB have further reviewed pages 314-315 of the 2004 Green Book as suggested by FHWA. Please see the response below regarding proceeding forward with the VE recommendation for proposed ramp design showing an 8-ft outside shoulder width for the I-85 southbound to SR400 northbound ramp and the I-85 northbound to SR400 southbound ramp. The FHWA comment is listed below followed by the response from HNTB which includes their interpretation of the Chapter 4 section titled "Width of Shoulders" from pages 314-315 of the AASHTO 2004 Green Book along with supporting excerpts from the 2004 Green Book. The GDOT- Office of Urban Design concurs with the response provided below by HNTB.

FHWA Comment on the VE Study recommendations – Melinda Roberson

At this time, FHWA does not concur with the variation proposed for recommendations SN-1 or SS-2. We concur that using a 8' shoulder width meets the referenced language from the Green Book, however, we feel there should to be a 2' offset to the face of barrier for a total distance of 10' from edgeline to face of barrier, especially considering that there is some consideration being given to semitrailer vehicles in the design. Please refer to page 314-315 of the 2004 Green Book.

FHWA concurs with all other recommendations in the report. Please advise us how you would like to proceed.

HNTB Response – Keith Strickland

HNTB's understanding of the Chapter 4 section titled "Width of Shoulders", pages 314-315 of the AASHTO 2004 Green Book is as follows:

The 2nd paragraph of this section that includes the following text - "*Where roadside barriers, walls, or other vertical elements are present, it is desirable to provide a graded shoulder wide enough that the vertical elements will be offset a minimum of 0.6 m [2 ft] from the outer edge of the usable shoulder.*" only pertains to roadway sections (i.e., only roadway sections would have graded shoulders) and not the proposed ramp bridges.

Ms. Roberson
Page 2
May 1, 2009

The last paragraph in this same section includes the following text - "*Shoulders on structures should normally have the same width as usable shoulders on the approach roadways.*" is the guidance for shoulders on bridges. The subsequent text in this last paragraph **only** discusses cases where structure shoulder widths may need to be **less** than (not greater than) the approach usable shoulder widths. This last paragraph also includes a reference to Chapter 10 of the Green Book, which was also referenced in the VE Responses for Recommendations SN-1 an SS-2 as follows:

"The AASHTO publication, *A Policy on Geometric Design of Highways and Streets*, 2004, indicates on page 838, "*Directional ramps with a design speed over 40 mph should have a paved right shoulder width of 8 to 10 ft and a paved left shoulder width of 1 to 6 ft.*" The revised shoulder widths meet these criteria.

The next to the last bullet in this same list on page 840 under "Shoulders and lateral clearances" also describes the widths of shoulders on structures. It states "*Ramps on overpasses should have the full approach roadway width carried over the structure.*" HNTB's interpretation of full approach roadway width as described in this reference is the travel lane width plus any usable shoulder width, which is consistent with our understanding of the section in Chapter 4, Cross Section Elements, described above.

The GA400 Corridor allows limited access for semi-trailer vehicles. The truck percentages for the GA400 Corridor within the project limits is 3.5% for the design and build years according the project's traffic studies. This minimal truck percentage further supports the adequacy of the 8 ft outside shoulder width.

Based on the aforementioned information, it was HNTB's and the GDOT- Office of Urban Design's understanding that the AASHTO Green Book did not require the additional 2 ft of shoulder width (increasing 8 ft to 10 ft) on the proposed ramp bridges. Additionally, moving forward with the proposed design using the 8' outside shoulder width would result in a significant cost savings. The VE Recommendations SN-1 and SS-2 were estimated in the VE Study to save approximately $1,950,000 and $840,269, respectively in construction cost.

If you have any additional questions or concerns, please contact Charles Robinson or Albert Shelby at 404-631-1675.

Sincerely,

James B. Buchan

James B. Buchan, P.E.
State Urban Design Engineer

JBB:car AVS

Attachments:
Mark-ups of proposed GA400/I-85 Connector Ramps (2 pages)
Excerpts from 2004 AASHTO Green Book (pgs. 314-315 and 838-840)

Well-designed and properly maintained shoulders are needed on rural highways with an appreciable volume of traffic, on freeways, and on some types of urban highways. Their advantages include:

- Space is provided away from the traveled way for vehicles to stop because of mechanical difficulties, flat tires, or other emergencies.
- Space is provided for motorists to stop occasionally to consult road maps or for other reasons.
- Space is provided for evasive maneuvers to avoid potential crashes or reduce their severity.
- The sense of openness created by shoulders of adequate width contributes to driving ease and reduced stress.
- Sight distance is improved in cut sections, thereby potentially improving safety.
- Some types of shoulders enhance highway aesthetics.
- Highway capacity is improved because uniform speed is encouraged.
- Space is provided for maintenance operations such as snow removal and storage.
- Lateral clearance is provided for signs and guardrails.
- Storm water can be discharged farther from the traveled way, and seepage adjacent to the traveled way can be minimized. This may directly reduce pavement breakup.
- Structural support is given to the pavement.
- Space is provided for pedestrian and bicycle use, for bus stops, for occasional encroachment of vehicles, for mail delivery vehicles, and for the detouring of traffic during construction.

For further information on other uses of shoulders, refer to NCHRP Report 254, *Shoulder Geometrics and Use Guidelines* (6).

Urban highways generally have curbs along the outer lanes. A stalled vehicle, during peak hours, disturbs traffic flow in all lanes in that direction when the outer lane serves through-traffic. Where on-street parking is permitted, the parking lane provides some of the same services listed above for shoulders. Parking lanes are discussed later in this chapter in the section on "On-Street Parking."

Width of Shoulders

Desirably, a vehicle stopped on the shoulder should clear the edge of the traveled way by at least 0.3 m [1 ft], and preferably by 0.6 m [2 ft]. This preference has led to the adoption of 3.0 m [10 ft] as the normal shoulder width that should be provided along high-type facilities. In difficult terrain and on low-volume highways, shoulders of this width may not be practical. A minimum shoulder width of 0.6 m [2 ft] should be considered for the lowest-type highway, and a 1.8- to 2.4-m [6- to 8-ft] shoulder width is preferable. Heavily traveled, high-speed highways and highways carrying large numbers of trucks should have usable shoulders at least 3.0 m [10 ft] wide and preferably 3.6 m [12 ft] wide; however, widths greater than 3.0 m [10 ft] may encourage unauthorized use of the shoulder as a travel lane. Where bicyclists and pedestrians are to be accommodated on the shoulders, a minimum usable shoulder width (i.e., clear of rumble strips) of

1.2 m [4 ft] should be used. For additional information on shoulder widths to accommodate bicycles, see the AASHTO *Guide for the Development of Bicycle Facilities* (7). Shoulder widths for specific classes of highways are discussed in Chapters 5 through 8.

Where roadside barriers, walls, or other vertical elements are present, it is desirable to provide a graded shoulder wide enough that the vertical elements will be offset a minimum of 0.6 m [2 ft] from the outer edge of the usable shoulder. To provide lateral support for guardrail posts and/or clear space for lateral dynamic deflection of the particular barrier in use, it may be appropriate to provide a graded shoulder that is wider than the shoulder where no vertical elements are present. On low-volume roads, roadside barriers may be placed at the outer edge of the shoulder; however, a minimum clearance of 1.2 m [4 ft] should be provided from the traveled way to the barrier.

Although it is desirable that a shoulder be wide enough for a vehicle to be driven completely off the traveled way, narrower shoulders are better than none at all. For example, when a vehicle making an emergency stop can pull over onto a narrow shoulder such that it occupies only 0.3 to 1.2 m [1 to 4 ft] of the traveled way, the remaining traveled way width can be used by passing vehicles. Partial shoulders are sometimes used where full shoulders are unduly costly, such as on long (over 60 m [200 ft]) bridges or in mountainous terrain.

Regardless of the width, a shoulder should be continuous. The full benefits of a shoulder are not realized unless it provides a driver with refuge at any point along the traveled way. A continuous shoulder provides a sense of security such that almost all drivers making emergency stops will leave the traveled way. With intermittent sections of shoulder, however, some drivers will find it necessary to stop on the traveled way, creating an undesirable situation. A continuous paved shoulder provides an area for bicyclists to operate without obstructing faster moving motor vehicle traffic. Although continuous shoulders are preferable, narrow shoulders and intermittent shoulders are superior to no shoulders. Intermittent shoulders are briefly discussed below in the section on "Turnouts."

Shoulders on structures should normally have the same width as usable shoulders on the approach roadways. As previously discussed, the narrowing or loss of shoulders, especially on structures, may cause serious operational and safety problems. Long, high-cost structures usually warrant detailed special studies to determine practical dimensions. Reduced shoulder widths may be considered in rare cases. A discussion of these conditions is provided in Chapters 7 and 10.

Shoulder Cross Sections

Important elements in the lateral drainage systems, shoulders should be flush with the roadway surface and abut the edge of the traveled way. All shoulders should be sloped to drain away from the traveled way on divided highways with a depressed median. With a raised narrow median, the median shoulders may slope in the same direction as the traveled way. However, in regions with snowfall, median shoulders should be sloped to drain away from the traveled way to avoid melting snow draining across travel lanes and refreezing. All shoulders should be sloped sufficiently to rapidly drain surface water, but not to the extent that vehicular use would be

Ramp Traveled-Way Widths

Width and cross section. Ramp traveled-way widths are governed by the type of operation, curvature, and volume and type of traffic. It should be noted that the roadway width for a turning roadway includes the traveled-way width plus the shoulder width or equivalent clearance outside the edges of the traveled way. The section "Widths for Turning Roadways" in Chapter 3 may be referenced for additional discussion on the treatments at the edge of traveled way. Design widths of ramp traveled ways for various conditions are given in Exhibit 10-67. Values are shown for three general design traffic conditions, as follows:

Traffic Condition A—predominantly P vehicles, but some consideration for SU trucks.

Traffic Condition B—sufficient SU vehicles to govern design, but some consideration for semitrailer vehicles.

Traffic Condition C—sufficient buses and combination trucks to govern design.

Traffic conditions A, B, and C are described in broad terms because design traffic volume data for each type of vehicle are not available to define these traffic conditions with precision in relation to traveled-way width. In general, traffic condition A has a small volume of trucks or only an occasional large truck, traffic condition B has a moderate volume of trucks (in the range of 5 to 10 percent of the total traffic), and traffic condition C has more and larger trucks.

Shoulders and lateral clearances. Design values for shoulders and lateral clearances on the ramps are as follows:

- When paved shoulders are provided on ramps, they should have a uniform width for the full length of ramp. For one-way operation, the sum of the right and left shoulder widths should not exceed 3.0 to 3.6 m [10 to 12 ft]. A paved shoulder width of 0.6 to 1.2 m [2 to 4 ft] is desirable on the left with the remaining width of 2.4 to 3.0 m [8 to 10 ft] used for the paved right shoulder.
- The ramp traveled-way widths from Exhibit 10-67 for Case II and Case III should be modified when paved shoulders are provided on the ramp. The ramp traveled-way width for Case II should be reduced by the total width of both right and left shoulders. However, in no case should the ramp traveled-way width be less than needed for Case I. For example, with condition C and a 125-m [400-ft] radius, the Case II ramp traveled-way width without shoulders is 6.4 m [21 ft]. If a 0.6-m [2-ft] left shoulder and a 2.4-m [8-ft] right shoulder are provided, the minimum ramp traveled-way width should be 4.8 m [15 ft].
- Directional ramps with a design speed over 60 km/h [40 mph] should have a paved right shoulder width of 2.4 to 3.0 m [8 to 10 ft] and a paved left shoulder width of 0.3 to 1.8 m [1 to 6 ft].
- For freeway ramp terminals where the ramp shoulder is narrower than the freeway shoulder, the paved shoulder width of the through lane should be carried into the exit terminal. It should also begin within the entrance terminal, with the transition to the

Metric

Radius on inner edge of pavement R (m)	Case I A	Case I B	Case I C	Case II A	Case II B	Case II C	Case III A	Case III B	Case III C
	Pavement width (m)								
	Case I: One-lane, one-way operation—no provision for passing a stalled vehicle			Case II: One-lane, one-way operation—with provision for passing a stalled vehicle			Case III: Two-lane operation—either one-way or two-way		
	Design traffic conditions								
15	5.4	5.5	7.0	6.0	7.8	9.2	9.4	11.0	13.6
25	4.8	5.0	5.8	5.6	6.9	7.9	8.6	9.7	11.1
30	4.5	4.9	5.5	5.5	6.7	7.6	8.4	9.4	10.6
50	4.2	4.6	5.0	5.3	6.3	7.0	7.9	8.8	9.5
75	3.9	4.5	4.8	5.2	6.1	6.7	7.7	8.5	8.9
100	3.9	4.5	4.8	5.2	5.9	6.5	7.6	8.3	8.7
125	3.9	4.5	4.8	5.1	5.9	6.4	7.6	8.2	8.5
150	3.6	4.5	4.5	5.1	5.8	6.4	7.5	8.2	8.4
Tangent	3.6	4.2	4.2	5.0	5.5	6.1	7.3	7.9	7.9

Width modification regarding edge treatment

	Case I	Case II	Case III
No stabilized shoulder	None	None	None
Sloping curb	None	None	None
Vertical curb: one side	Add 0.3 m	None	Add 0.3 m
Vertical curb: two sides	Add 0.6 m	Add 0.3 m	Add 0.6 m
Stabilized shoulder, one or both sides	Lane width for conditions B & C on tangent may be reduced to 3.6 m where shoulder is 1.2 m or wider	Deduct shoulder width; minimum pavement width as under Case I	Deduct 0.6 where shoulder is 1.2 m or wider

Note: A = predominantly P vehicles, but some consideration for SU trucks.
B = sufficient SU vehicles to govern design, but some consideration for semitrailer combination trucks.
C = sufficient bus and combination-trucks to govern design.

US Customary

Radius on inner edge of pavement R (ft)	Case I A	Case I B	Case I C	Case II A	Case II B	Case II C	Case III A	Case III B	Case III C
	Pavement width (ft)								
	Case I: One-lane, one-way operation—no provision for passing a stalled vehicle			Case II: One-lane, one-way operation—with provision for passing a stalled vehicle			Case III: Two-lane operation—either one-way or two-way		
	Design traffic conditions								
50	18	18	23	20	26	30	31	36	45
75	16	17	20	19	23	27	29	33	38
100	15	16	18	18	22	25	28	31	35
150	14	15	17	18	21	23	26	29	32
200	13	15	16	17	20	22	26	28	30
300	13	15	15	17	20	22	25	28	29
400	13	15	15	17	19	21	25	27	28
500	12	15	15	17	19	21	25	27	28
Tangent	12	14	14	17	18	20	24	26	26

Width modification regarding edge treatment

	Case I	Case II	Case III
No stabilized shoulder	None	None	None
Sloping curb	None	None	None
Vertical curb: one side	Add 1 ft	None	Add 1 ft
Vertical curb: two sides	Add 2 ft	Add 1 ft	Add 2 ft
Stabilized shoulder, one or both sides	Lane width for conditions B & C on tangent may be reduced to 12 ft where shoulder is 4 ft or wider	Deduct shoulder width; minimum pavement width as under Case I	Deduct 2 ft where shoulder is 4 ft or wider

Note: A = predominantly P vehicles, but some consideration for SU trucks.
B = sufficient SU vehicles to govern design, but some consideration for semitrailer combination trucks.
C = sufficient bus and combination-trucks to govern design.

Exhibit 10-67. Design Widths for Turning Roadways

narrower ramp shoulder accomplished gracefully on the ramp end of the terminal. Abrupt changes should be avoided.

- Ramps should have a lateral clearance on the right outside of the edge of the traveled way of at least 1.8 m [6 ft], and preferably 2.4 to 3.0 m [8 to 10 ft], and a lateral clearance on the left of at least 1.2 m [4 ft] beyond the edge of traveled way.
- Where ramps pass under structures, the total roadway width should be carried through the structure. Desirably, structural supports should be located beyond the clear zone. As a minimum, structural supports should be at least 1.2 m [4 ft] beyond the edge of paved shoulder. The AASHTO *Roadside Design Guide* (3) provides guidance on clear zone and the use of roadside barriers.
- Ramps on overpasses should have the full approach roadway width carried over the structure.
- Edge lines or some type of color or texture differentiation between the traveled way and shoulder is desirable.

Shoulders and curbs. Shoulders should be provided on ramps and ramp terminals in interchange areas to provide a space that is clear of the traveled way for emergency stopping, to minimize the effect of breakdowns, and to aid drivers who may be confused.

Ramps at interchanges should be designed without curbs. Curbs should be considered only to facilitate particularly difficult drainage situations, such as in urban areas where restrictive right-of-way favors enclosed drainage. In some cases, curbs are used at the ramp terminals but are omitted along the central ramp portions. Where curbs are not used, full-depth paving should be provided on shoulders because of the frequent use of shoulders for turning movements.

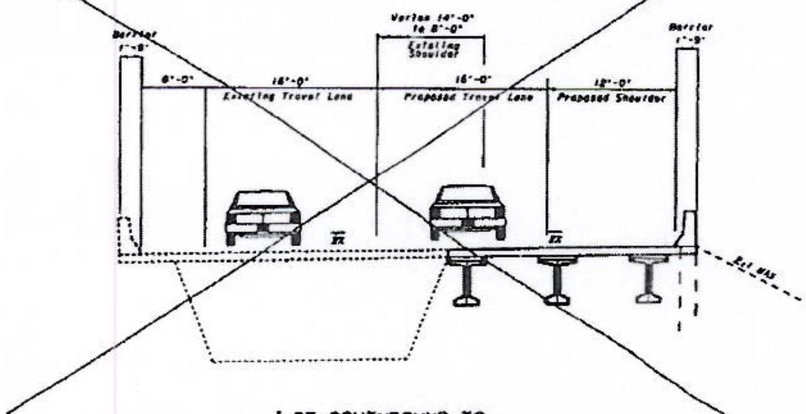
On low-speed facilities, curbs may be placed at the edge of roadway. Vertical curbs are seldom used in conjunction with shoulders, except where pedestrian protection is needed. Where curbs are used on high-speed facilities, sloping curbs should be placed at the outer edge of the shoulder. Because of fewer restrictions and more liberal designs in rural areas, the need for curbs seldom arises. See Chapter 4 for a full discussion of shoulder cross-section elements.

Ramp Terminals

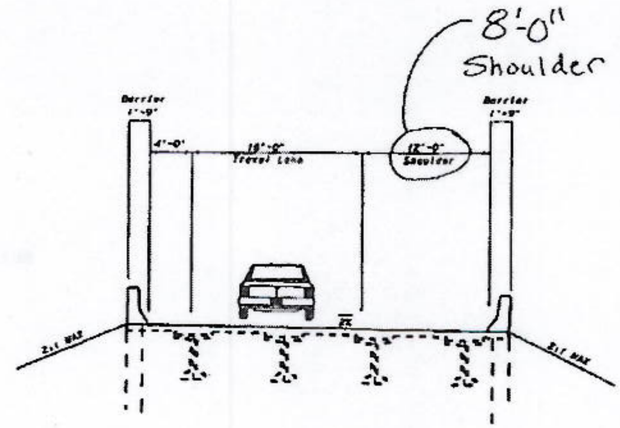
The terminal of a ramp is that portion adjacent to the through traveled way, including speed-change lanes, tapers, and islands. Ramp terminals may be the at-grade type, as at the crossroad terminal of diamond or partial cloverleaf interchanges, or the free-flow type where ramp traffic merges with or diverges from high-speed through traffic at flat angles. Design elements for the at-grade type are discussed in Chapter 9, and those for the free-flow type are discussed in the following sections.

Terminals are further classified as either single or multilane, according to the number of lanes on the ramp at the terminal and as either a taper or parallel type, according to the configuration of the speed-change lane.

This section is no longer applicable.
Existing SR13 and proposed SR 400 bridges will be separate structures.



I-85 SOUTHBOUND TO
BUFORD HIGHWAY (SR 13) SOUTHBOUND/SR 400 NORTHBOUND

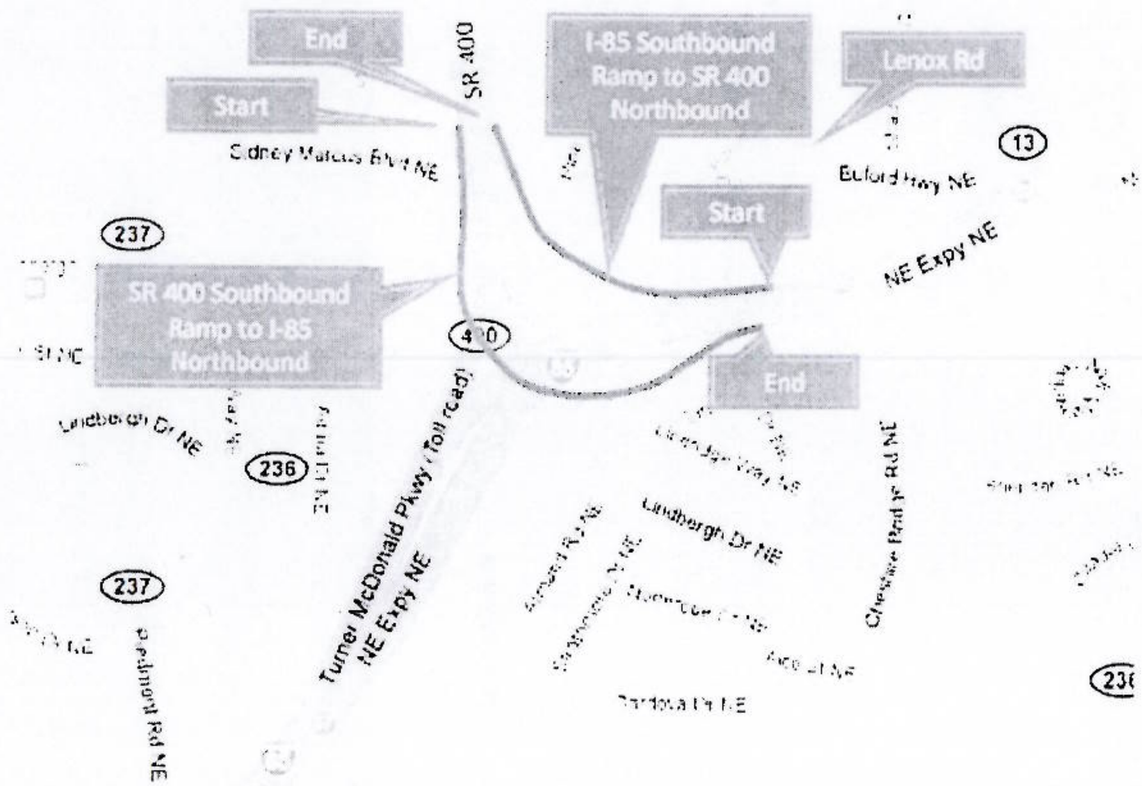


I-85 SOUTHBOUND TO SR 400 NORTHBOUND

SCALE: N.T.S.

HNTB	SR 400/ I-85 CONNECTOR RAMPS TYPICAL SECTIONS	NH000-0085-02(153) PI NO. 762380	SHEET 1 OF 2

PROJECT PLAN



PRECONSTRUCTION STATUS REPORT FOR PI:762380-

SR 400/I-85 CONNECTOR RAMPS

PROJ ID :	762380-					**MGMT LET DATE :**	
COUNTY :	Fulton					**MGMT ROW DATE :**	05/15/2010
LENGTH (MI) :	0.34	**MPO:**	Atlanta TMA	**DOT DIST:**	7		
PROJ NO.:	NH000-0085-02(153)	**TIP #:**	AT-AR-212B	**CONG. DIST:**	5	**SCHED LET DATE :**	6/8/2011
PROJ MGR:	Shelby, Albert	**MODEL YR :**	2020	**BIKE:**	N	**WHO LETS?:**	GDOT Let
OFFICE :	Urban Design	**TYPE WORK:**	Interchange	**MEASURE:**	E	**LET WITH :**	
CONSULTANT:	Turnkey Consultant, (Contract with GDOT)	**CONCEPT:**	INTERCHANGE	**NEEDS SCORE:**	05		
SPONSOR :	GDOT	**PROG TYPE:**	New Construction	**BRIDGE SUFF:**			
DESIGN FIRM:	HNTB Corporation	**Prov. for ITS:**	N				
		BOND PROJ :					

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACTUAL FINISH	%
	7/30/2009	Concept Development	4/25/2007		73
		Concept Meeting	9/2/2008	9/2/2008	100
6/18/2009	6/18/2009	PM Submit Concept Report			0
6/19/2009	7/30/2009	Receive Preconstruction Concept Approval			0
7/30/2009	**7/30/2009**	**Management Concept Approval Complete**			0
	6/30/2009	Value Engineering Study	10/29/2008		83
		Public Information Open House Held	2/26/2009	2/26/2009	100
	3/18/2010	**Environmental Approval**	**10/25/2008**		2
1/1/2010	2/25/2010	Pub Hear Held/Comm Resp (EA/FONSI, GEPA)			0
	7/9/2009	Mapping	7/9/2008		94
	6/25/2009	Field Surveys/SDE	12/15/2007		100
	12/11/2009	**Preliminary Plans**	**1/16/2009**		16
6/19/2009	12/11/2009	Preliminary Bridge Design			0
7/31/2009	12/10/2009	Underground Storage Tanks			0
6/19/2009	10/1/2009	404 Permit Obtainment			0
4/9/2010	4/12/2010	PFPR Inspection			0
4/13/2010	8/2/2010	R/W Plans Preparation			0
8/3/2010	**9/3/2010**	**R/W Plans Final Approval**			0
5/19/2010	5/21/2010	L & D Approval			0
9/6/2010	4/12/2011	R/W Acquisition			0
12/16/2010	12/29/2010	Stake R/W			0
6/19/2009	12/11/2009	Soil Survey			0
12/14/2009	4/28/2010	Bridge Foundation Investigation			0
5/24/2010	**1/13/2011**	**Final Design**			0
7/15/2010	1/5/2011	Final Bridge Plans Preparation			0
2/4/2011	2/7/2011	FFPR Inspection			0
2/21/2011	3/4/2011	Submit FFPR Responses(OES)			0

PROGRAMMED FUNDS

Phase	Approved	Proposed	Cost	Fund	Status	Date Auth
PE	2001	2001	5,230,609.02	Q05	AUTHORIZED	8/4/2000
ROW	LR	2016	12,511,825.16	L010	PRECST	
ROW	NONE	2016	494,000.00	L020	PRECST	
CST	LR	2020	49,049,192.00	L050	PRECST	

PE Cost Est Amt:		Date:	
ROW Cost Est Amt:	5,555,400.00	Date:	12/10/1994
ROW Cost Est Amt:	494,000.00	Date:	12/10/1994
CST Cost Est Amt:	22,470,000.00	Date:	3/3/2004

STIP AMOUNTS

Phase	Cost	Fund
PE		Q05
ROW	0.00	L010
ROW	0.00	L020
CST	0.00	L050

PDD:	LR- 12-5-94 ASSIGNED URBAN DESIGN. South to North. Will require RW. 3/10/04
Bridge:	BRIDGE REQUIRED
Design:	UD: Robinson, C., Jenkins, A. (12/29/08)
EIS:	EA/NoSched(ChiefDirectedContinueWork)/Phillips09.12.08
LGPA:	NOTIFICATION NEEDED
Planning:	Work Zone Safety: project considered significant; Transportation Management Plan(TMP) required
Programming:	#1 12-05|#2 1-06|#3 8-06|#4 6-07|ADDED $444,600 FED FY 2009 EARMARK 3-27-09
Traffic Op:	SEND PLNS FOR REVIEW 12-13-07
Utility:	CC: NEED PPLANS 12/04;OCD SUE;Tk1,Ct15
EMG:	INTERCHANGE; C=M/D(HNTB)/S(G&O'M)(SS)

District Comments

VE held 1/12-15/09. PIOH held 2/26/09. Responses to PIOH being finalized. Concept being finalized. (4/17/09)

Prel. Parcel CT:		**Total Parcel in ROW System:**		**Cond. Filed:**		**Acquired by:**	DOT
Under Review:		**Options - Pending:**		**Relocations:**		**Acquisition MGR:**	
Released:		**Condemnations- Pend:**		**Acquired:**		**R/W Cert Date:**	

DEEDS CT: